DOCUMENT RESUME

ED 109 144 TM 004 554

AUTHOR Fullan, Michael; Eastabrook, Glenn
TITLE The Process of Educational Change at the School Level: Deriving Action Implications from Questionnaire Data.
PUB DATE Feb 73
NOTE 45p.; Paper presented at the Annual Meeting at the American Educational Research Association (February 25-28, 1973)

EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE
DESCRIPTORS *Educational Change; *Educational Innovation; Elementary Secondary Education; Parent Participation; Parent Role; Parent School Relationship; Parent Student Relationship; Participant Satisfaction; *Questionnaires; School Environment; Schools; Student Attitudes; Student Participation; Student Role; Student School Relationship; *Student Teacher Relationship; Teacher Attitudes; Teacher Role; Test Results
IDENTIFIERS Canada; Ontario

ABSTRACT

Despite massive inputs of resources during the last 15 years, and despite numerous "adoptions" of educational innovations, very little significant change has occurred at the school level corresponding to the intended consequences of these innovations. The modal process of change has been characterized by a pattern whereby innovations are developed external to schools and then transmitted to them on a relatively universalistic basis. Instead of innovations being viewed as part of a universe of means, schools are viewed as part of a universe of adopters. This paper is based on a large scale research project involving students, parents, and teachers in 46 Ontario elementary and secondary schools. This study was conducted in order to facilitate students, parents, and teacher understanding of their roles in the educational change process at the school level by gathering, feeding back, and helping to derive action implications of data on the roles and role relationship of these groups and the nature of their involvement in the school. (Author/DEP)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED109144

THE PROCESS OF EDUCATIONAL CHANGE AT THE SCHOOL LEVEL: DERIVING ACTION IMPLICATIONS FROM QUESTIONNAIRE DATA*

Michael Fullan

Glenn Eastabrook

Department of Sociology

Ontario Institute for Studies in Education

TM 004 554

Paper presented at the American Educational Research Association, Annual Conference February 25-28, 1973

* We would like to thank Cheryl Mandel for computing the results and helping us prepare this paper.

This paper is based on a large scale research project of students, parents, and teachers in 46 Ontario elementary and secondary schools. The main purpose of the project is to facilitate users (students, parents, teachers) understanding of their roles in the educational change process at the school level by gathering, feeding back, and helping to derive action implications of data on the roles and role relationships of these groups and the nature of their involvement in the school. In the following sections we describe the theoretical rationale of our approach, the sample and methods, some of the main findings, and the dynamics of feedback.

Rationale

A review of the research literature on user experience with educational innovations described elsewhere led us to the following conclusions (Fullan, 1972).

1. Despite massive inputs of resources during the last 15 years, and despite numerous "adoptions" of innovations, very little significant change has occurred at the school level corresponding to the intended consequences of these innovations.
2. The modal process of change has been characterized by a pattern whereby innovations are developed external to schools and then transmitted to them on a relatively universalistic basis. The consumers or users of innovations (teachers, parents, students) have had a limited role in this process, but rather are seen as relatively passive adopters of the best of recent innovations. Note that primacy is given to innovations (which often become ends in themselves) rather than user capacities to innovate. In other words, instead of innovations being viewed as part of a universe of means, schools are viewed as part of a universe of adopters. Where users did innovate, it was often individualistic - a result of a permissive rather than a participative process.

3. The following implications of the modal process just described are evident:

(a) The values and goals of users as articulated by them have no direct input or influence in the process. The results are that downward innovations do not take hold and diversity of innovations is not allowed for.

(b) Social system or role changes in user systems,which are theoretically part and parcel of the intended consequences of most recent educational innovations are not recognized and planned for. Virtually every significant change has implications for changes in roles and role relationships; these changes must be part and parcel of the implementation process.

(c) The dynamics of the process of role change has been entirely misunderstood and neglected. There is little awareness that innovations require unlearning and relearning and create uncertainty and a concern about competencies to perform these new roles. Consequently, very little perservice preparation is included in plans for change; but more fundamentally, virtually no time, resources, and other supports are built into learning of new roles in the ongoing system <u>once the change has been initiated</u>. Since these requirements are not understood and taken into account, even innovations that are congruent with user objectives often fail.

(d) Consequent to c, new educational ideas and organizational changes that are introduced become empty alternatives inasmuch as they create unrealistic conditions and expectations for user performance. Structural changes are necessary but not sufficient to bring about significant change. Another way of stating this: understanding a problem and identifying changes needed to correct it are entirely separate steps from knowing how to bring these changes about.

(e) The most effective solution can probably never come through the introduction of more and more innovations with additional resources (such as better training in new roles) because the existing systemic context of the user effectively prevents the development of these new roles once they are introduced. Furthermore,

the most effective solution does not entail leaving individual users to make their own choices in permissive environments.

These conclusions led us to suggest that a radical restructuring toward active user roles in the process of change was required if effective changes were to occur. This position is based on an hypothesis which goes considerably beyond the well known proposition that participation leads to acceptance of change. A far more critical variable for us regarding effective implementation is not acceptance but rather user capabilities to perform new roles. (See Gross et. al., 1972). There are at least two components of capabilities - new role orientations, and new skills implied by any particular change. To state this position in other words, the goals of virtually every recent educational innovation - open education, independent study, community involvement - imply new roles (orientations and skills) if they are to be implemented effectively. The only way that these new roles will develop is if those affected (the users) play an active role at each stage because the learning of new roles is a developmental process that requires continuous involvement, choice, feedback, and commitment on the part of the user (See also Combs, 1972). Currently, most educational innovations are adopted in such a way that users do not play active roles and there are few provisions to support people in the development of these roles. Since users are unprepared to play these new roles, and since the innovative process does not support this development, "adopted" innovations fail to become effectively implemented.

In light of these assumptions we gathered data from user groups in several schools in order to determine to what degree they played "active roles" in the school (which we expected would be very limited), and to consider the implications of the findings with schools in our sample who were interested in doing this.

Sample and Methods

Our first step involved the selection of a large city school system and one county system. We were more interested in across school variation so we wanted to select schools from the same system. At the same time it seemed advisable to include both a city and a county system. Within these systems we selected randomly 26 schools in the city system (10 elementary, 10 junior high and 6 secondary schools) and 20 schools (15 elementary and 5 secondary) in the county system. Cooperation was sought from each principal. There were six refusals in the city system and one in the county. These schools were replaced by other selections. Within each school the sample included all teachers, a 10% random sample of students and a 10% random sample of parents. The data was gathered by means of questionnaires. Student questionnaires were filled out at the school in groups, teachers on their own time and parents by mail. Data was collected from February to May, 1972. The final sample N with percentage returns was students (3593/90% return), parents (1783/51%), and teachers (728/40% return). We consider the return rate from parents as satisfactory for a mailed questionnaire. The low return rate from teachers was disappointing, and was based on several reasons which we do not go into here. Obviously, the results from teachers must be treated very tentatively and with caution. The very high rate of return for students meant that the student findings should be representative of students in the 46 schools in our sample.

Findings

We gathered a wide range of data from these groups. We can only present some of the main findings in this paper.

Students (Tables 1, 2, 3, 4, 5)

Tables 1 to 5 present some of the findings from students. We might view these data in terms of comparison across the three levels, and in terms of the absolute response percentages. In virtually every case the elementary level children view their teachers more favourably than junior high students, who in turn are more positive than secondary school students.

In absolute terms, students' relationships to teachers is characterized by a fairly low level of exchange and influence - in most cases, well less than half of the students say that a particular behaviour or attitude of teachers occurs often or always compared to sometimes or never. For example, on the question "Do teachers understand the students' points of view on classroom or school matters", 41% of the elementary students, 32% of the junior high, and 25% of the secondary school students answered often or always. Similar responses occur on the questions "Do you feel free to talk to teachers about problems you are having with your school work", and "If I suggest something to my teachers, they will listen to me". Only on the question of how friendly and encouraging teachers are do the percentages average about half the students.

In summary, over half the students in our sample are not experiencing frequent empathetic, open, influential relationships with most of their teachers. The percentages decrease with each educational level, although this decrease may be a function of size, and contacts with greater numbers of people.

Identical questions were asked about students' perceptions of the principal. (Table 2), Perceptions of the principal are surprisingly similar to the perceptions of teachers. One would expect that the relationship to teachers would be closer due to the proximity in the classroom, but this is not the case. As might be expected at the secondary school a large percentage(20-35%) of students do not have an opinion about the principal, presumably because they have little contact with him due to the size of the school.

It is interesting to examine student involvement in decision making because we have data on teachers, parents, and principal/vice-principal views as well as student views, although please note that the exact wording and categories of response are slightly different in some cases. On the question of Perceived actual influence on decisions (Table 3) students and teachers at the elementary and junior levels have similar views (33% of students compared to 29% of teachers at the elementary level, and 39% compared to 34% at the junior high). The only large discrepancy exists in the case of secondary school level where 45% of the teachers say that students are involved, and only 27% of students think that students are involved. Parents, as might be expected, do not know whether students are involved (43% to 50% did not know).

When we asked whether students should be involved in decision about goals, subject matter, and school rules (Table 4) only about 40% (38-44) of the students said that they should, whereas from 47% to 62% of the parents, and 64% to 77% of the teachers thought that students should be. In other words, a smaller percentage of students compared to parents and teachers think that students should be involved in decision making. This is confirmed in another question in Table 4, when we asked students "how do you feel about becoming a member of a committee in the school which would discuss goals, subjects, rules and regulations etc.". Less than half of the sample at the junior high, and high school level say that they would like to, although about one-third of the sample did not know. One wonders, particularly in light of the previous data and the comments by students recorded below, whether the relatively low student interest is due to a feeling that teachers and administrators should decide these matters, or whether students feel that involvement will not be that productive from their point of view.

Three other items on student perceptions of the school are reported in Table 5. Here again we see the marked difference between elementary and junior high students on the one hand, and secondary school students on the other. One half of the secondary school students find most of their classes or lessons boring compared to slightly over one-quarter of the other students. Secondary school students are also much less likely to value their subjects as important, and to feel that people in their school work together.

Students also had the opportunity at the end of the questionniare to write in any comments they wanted to express about the school, or the project. About 52% of the students did write in views that concerned them. In fact, these comments provided a rich appreciation of their views because they were expressed in their own words, and one would presume were somewhat spontaneous. It is not possible to report the depth of student views here, but the main themes that were evident can be indicated.

We have divided the student comments into two general categories (and certain subcategories within these). The first general category contains 943 comments about the school and education. Theother category contains opinions about the project and/or its possible implications. There are very definite themes within these categories. A few respresentative comments are made below according to the following four themes: 1) attachment, and 2) alientation re school life and 3) positive comments and 4) critical comments on the project.

Attachment Theme (258 comments)

" I wouldn't want the school to be changed at all. I like it the way it is.

" I think this school - by that I mean the principal and the student council are sincerely trying to make school an enjoyable and great place to be. And, they have the interests of the students at heart (high school).

" I enjoy this school a lot and hope to continue right through to grade 13. This school offers good topics of learning as well as good involvement in

extra-curricular activities (high school)."

Alienation Theme (685 comments)

" The teachers don't understand me. They are supposed to prepare us for life but they don't. Instead they condition us to the way society wants us to live (junior high).

" Schools are becoming factories. They turn out students with diplomas at maximum speed. We are being pushed through whether we have knowledge or not. I want to learn, not spend my required four or five years getting my little seal of approval and move on. For God's sake, tell them to slow down (high school).

" They say its our life. And they make us come to school. (elementary)

" I know that school is important to me and that I need it to get anywhere in life. But I'm beginning to realize that this reason is not good enough. I don't enjoy school at this point. It is the last place I want to be. If I wasn't so shy I imagine I could express these feelings to a teacher, but I've never spoken to one, not even about extra help (high school).

" I'm only in school so I can go to University so as to make more money than if I quit school now. I do not particularly like school. In fact, sometimes I hate it but I don't particularly want to be poor (high school).

" The school is very impersonal. It is hard to approach teachers about personal matters. If students felt that they were "someone" they would be more interested in school, society, parents and teachers. Make teachers approachable. Classes would be more interesting if students were able to relax (high school).

"I hope that this project will bring around new changes to the same old routine of the school. It's gotten that Monday seems like doomsday or something (high school)."

The Project: Positive and/or with Some Concern about putting the results into Practice (900 comments).

Elementary and Junior High

" I think this project is very interesting in many different ways. It asks many questions that I have never been asked before. But I enjoyed doing it.

"It was fun and encouraging. It let the children speak freely about the matter. Now we can speak for ourselves.

" I think this project is a good one because you get to discover how the students feel about things and it gets the students to think about things around the school.

" This is a very good and worthwhile project. The questions that were asked made a lot of sense and I hope that more changes and better changes will be made in this school.

The comments below were from high school students:

" I think this is a good project only if it brings about some changes that are badly needed; e.g. student-teacher relations and the prison impression each student has. Should be a more relaxed atmosphere.

" I think this project is a step in the right direction but unless some action is taken to reduce the apathy of the staff and therefore the students I think the whole school system is in a helluva lot of trouble. I would really like to see the results of these surveys posted in the school.

" This type of project could be very helpful in bringing about changes in the school system, but it seems to me that I have filled out this type of survey before and few changes occurred.

" I think this project is worthwhile, if changes are made, otherwise its just a waste of time although, I would like to thank you for the opportunity to express my views and for getting me out of a boring class."

The Project: Critical Comments (250 comments)

(About 150 of these students found the questions too general or the answers too restrictive).

" The questions were confining. They should have had a space to write in your answer if it wasn't in the list given.

" Most of the questions are too vague. There is always some exception which can't be considered in answering the questions.

(An additional 100 students, mainly at the high school level indicated in one form or another that we were wasting our time because nothing would come of the results (strictly speaking most of these opinions are not necessary critical of the idea of the project, but rather reflect futility).

" We never hear of the results. I wrote a questionnaire the same as this last fall, last year, the year before, etc. Why don't you make your results public to us, the students.

" A year ago I wrote a questionnaire very similar to this one. I stated the same opinions the way I know my friends selected also. So far I have seen no progress or results.

" I really don't believe this report is to be read or cared about, so why comment?"

There are some very clearcut patterns evident in the students' comments reported and others from the same themes not reported here:

(1) Students found the project interesting and worthwhile, (2) on the whole, they thought the survey was relevant and would provide important information about students' opinions, (3) they were appreciative of being asked. One gets the impression in many of the comments that students are very interested in talking about the issues covered in the questionnaire. Many found it enjoyable and important to express their own opinions and ideas, (4) for many students, the survey raised questions about things in the school they hadn't thought about; and in answering the questions they thought it created new awarenesses, understanding and ideas for them about social relations in the school, (5) students expressed a concern that the information would lead to changes. At the elementary and junior high level this tended to be characterized by hope and optimism, at the secondary level it was characterized by hope, skepticism, and in some cases cynicism. (6) Related to cynicism were the comments reported earlier where high school students expressed various forms of alienation or disaffection with school life.

On the whole, the student comments tend to confirm in richer detail the quantitative pattern reported in the tables. Moreover, if our assumption is at all correct that users (in this case students) must have an active, meaningful role if educational change is to be effective, then it is clear that the situations depicted by our sample of students are not conducive to effective change. The problem of deriving implications from these findings is taken up below.

Parents (Tables 6, 7, 8)

Data concerning parent contact and actual and desirable involvement with different aspects of the school are presented in Tables 6 - 8.

As might be expected, Table 6, shows fairly low actual contact with the school especially at the secondary school level. Less than half the junior high or secondary school parents have had at least one or more discussions with the principal or any teachers regarding goals, rules and regulations, subject matter, adopting new programs, etc. This is considerably higher at the elementary level (64%). At the secondary level during the average year 64% of the parents have never "been inside the school during school hours". This compares to 59% at the junior high and 33% at the elementary level. Similarly 59%, 52% and 36% respectively report that they have never "arranged to go to the school to talk with a teacher or principal about a school matter that concerns them during school hours". (This Table is not presented). Finally, 26% of the secondary, 54% of the junior high and 72% of the elementary level parents said that they had attended two or more meetings at the school.

Questions 4a and 4b of Table 6 examine more specific forms of involvement both in terms of actual involvement, and in terms of what people would like to see happen. As is evident, a small percentage of people are actually involved in discussions about "goals" and "new programmes". What is really interesting however is the split between those that view these aspects as the school's responsibility compare to those parents who would like to be involved in these kinds of discussions. For example, regarding goals and objectives 32-46% feel that this is the school's responsibility compared to 38-42% who feel that they, as parents, should be involved. If this pattern is matched at the individual school level it means that a substantial proportion want

to be involved, and a substantial proportion do not want to be. This would seem to complicate the question of parent involvement. Other data below confirms this difference of opinion in the community.

We also asked parents in our sample whether parents are involved in specific ways in the school, whether they think parents should be involved in these ways and whether they themselves would be interested in particular forms of involvement. We also asked teachers, principals/vice-principals and students identical or similar questions about parent involvement (Tables 7 and 8).

First let us summarise the overall pattern in Table 7. In each case a small percentage of parents say that parents are involved (usually about 10-20%), except in the case of working as teacher aides at the elementary level and being members of school committees. Regarding teacher aides, 47% of the parents at the elementary level say that parents are involved. Similarly 41% of the elementary level parents report that parents are members of school committees. This is also fairly high at the junior high level (34%).

Perhaps the most interesting set of questions is whether parents, teachers, administrators and students think that parents should be involved in these aspects of the school (Table 8). Of the eight forms of involvement in school decisions, there are four areas of decision making which are highly valued by each of the three groups ' - "goals and objectives of the school", "new programs or practices in the school", "helping plan what type of instruction is best for their own child", and being "members of school committees". A fifth form, "working as a teacher aide" is valued by administrators and teachers at the junior high and elementary level, and by parents at the elementary level. In most of these five forms of involvement, over 70% of the constituency sampled said that parents should be involved.

In asking questions about whether parents should be involved we might expect some degree of inflation in regard to whether individual parents would become involved. It is somewhat easier for parents to say that parents in general should be involved than to make a personal response of willingness to be involved.. In order to follow up the latter question we asked parents "would you be interested in being involved in the following eight activities". These results are presented in the last three columns of Table 8. Here again, parents are more likely to select "goals and objectives", "new programs and practices" and "helping plan instruction for their own children". The only form of involvement that has dropped substantially in commitment is "members of school committee".

One area we might look at more closely because of its recent importance is "working as a teacher aide". Elementary and junior high teachers and administrators strongly endorse this, and about two-thirds of the parents think that parents should be involved this way. Given the specific nature of this commitment, a fairly large percentage of elementary level parents (37%) say that they personally would be interested in working as a teacher aide.

There are two general observations we might make about the findings discussed in the last few pages. First, a substantial percentage of parents in all categories say that parents should and they personally would like to become involved in all eight activities. In four of the aspects this is as high as 70-80 percent; in the other four it ranges from 35-57%. It should also be recognized that in the latter four activities about 50% of the parents say that parents should not be involved. This might mean that in many school communities there will be strong differences of opinion among parents about involvement, that is, parents who say that parents should not be involved may

be opposed to other parents becoming involved in school decisions. On the other hand, the range of possible different types of involvement (eight of which we have mentioned) and the fairly strong endorsement among parents, teachers and administrators for most of these would provide a strong basis for working out the different forms of involvement appropriate to the particular community. Although the actual working out of these matters is not a simple matter.

The second general observation follows from the first. Despite endorsement and interest in involvement in all three constituencies, we have seen in the previous tables that actual involvement as perceived by all groups is limited. Why is this the case? One possibility is that the preferences reported in Table 8 are not valid, that all constituencies exaggerated their preferences and really do not mean what they say. Another possibility is that the preferances are valid, but there are constraints of various kinds that prevent involvement from developing. We prefer the latter possibility. When people are requested to answer what "should be" it is likely that some respond in terms of what they think is expected or currently popular without really believing it. But the data in Table 8 are so strong and consistent with other parts of the questionnaire and comments made by respondents at the end of the questionnaires, that we believe that the results are on the whole accurate. Therefore, it seems to us that an important task for schools, communities and researchers is to consider possible constraints to parent involvement. This is what we mean by deriving implications from the data (see the last section of the paper). A given school/community could begin to identify and discuss possible constraints and determine how they might be coped with. These may include constraints of time, organizational inflexibility, psychological (anxiety or ambiguity

about the meaning of parent involvement on the part of both teachers and parents) etc. We think that any of these constraints can be reduced only if those involved (administrators, teachers, parents, students) attempt to solve them together.

Teachers and Innovation (Tables 9, 10, 11)

As far as we know, past researchers studying educational change have not gathered much data of the type we have reported so far, i.e. from students, and parents about their perceptions of their roles. The same cannot be said of the teacher's perception of the social climate of the school. For this reason, and due to the low response rate we will not report the range of data we have from teachers. We do present, however, three tables of data dealing directly with questions of innovation. In table 9, there are six questions on different aspects of innovative activity involving fellow teachers in one's division or department. At the elementary level regarding teachers in the immediate grade level or division 51-53% feel that "fellow teachers' actually use new practices", "support and encourage other teachers who want to use new ideas", and "feel that changes that have been made have improved the quality of education" to a great extent or quite a bit. This means that almost 50% felt that fellow teachers performed this way to a moderate amount, very little, or not at all.

Of the other three items 36% of the elementary teachers feel that "teachers understand the objectives and nature of the changes they do adopt", and 63% say that "teachers evaluate or assess new practices which they have adopted".

There are two patterns to be noted in looking at the results across levels. First, in nearly every case teachers at the elementary and junior high levels perceived greater innovativeness in fellow teachers than do teachers at the

secondary level, although the differences are not large. For example, 51% of the elementary teachers say that "teachers actually use new practices" to a great extent or quite a bit, compared to 42% of the secondary school teachers. This does not necessarily mean that greater innovativeness actually occurs at the elementary and junior high level. It might mean that communication about innovations is less frequent at the secondary level. It should be recalled that all of these questions refer to fellow teachers in one's own grade level, division or department so that the size of the school does not play a direct role.

The other set of data we present concern specific innovations involving more than one teacher reported by teachers that the school had adopted in the school (they were asked to select the most significant or interesting one of them). We have grouped these into 15 categories according to frequency of mention by the 569 teachers who selected particular innovations. The most frequently selected innovations were the credit system or student choice in selecting courses (mentioned by 88 teachers, 53 of whom were in secondary schools) team teaching (mentioned by 60 teachers, 53 of whom were in elementary or junior high schools), open area or open plan (by 27 teachers). Other innovations selected by more than 15 teachers concerned new or revised courses.

We then asked a series of questions about these innovations (Table 10 and 11). No generalizations should be drawn from these data because they lump together all innovations selected. In further analyses we will be analyzing responses separately for each of the major 4 or 5 innovations selected.

The questions (in Tables 10 and 11) refer to specific evaluations by teachers of the innovations adopted. Again please note that these are results for all innovations combined. A little over one-third of the teachers (35%, 40%, 35%) reported that "there has been an open discussion in the

school of the advantages and disadvantages". About one-quarter (27%, 29%, 25%) felt that "the school searched for alternative solutions before adopting the new practice" (an additional 27%, 31% and 29%, did not know). A higher percentage felt that the practice made an improvement (70%, 59%, 66%).

Table II indicates that teachers were satisfied with the change (75%, 75%, 64%), and that students accepted it, in the opinion of the teachers (82%, 74%, 79%). Less than a majority of teachers felt that "parents were well informed about the innovation (42%, 31%, 37%).

The Relationship of Quality of Implementation (as perceived by teachers) to Meaningful User Roles (as reported by students, parents, and teachers).

As a final examination of the data, we would like to return to the hypothesis that effective implementation of change is related to active and meaningful roles of users (students, parents, teachers). It is impossible to test this adequately in our data because we do not have "objective" observations or measures of implementation, and we do not have student or parent perceptions of the specific innovations because these innovations were only identified by teachers during data gathering.*

We can, however, explore this relationship in a secondary way. What we did was identify a number of schools where the same innovation was selected by a large number of teachers in each school. Specifically, team

---

* This is a definite weakness.We wanted to leave open the selection of specific innovations to teachers. What we should have done is gather the data from teachers first, see what innovation(s) was selected, and then ask students and parents about this specific innovation using items in Tables 10 and 11. This procedure would have been somewhat time consuming and awkward with 46 schools but probably could have been managed. Also, if one was working with a small number of schools it would be important to gather some "objective" information on the quality of implementation.

teaching/open plan was selected by teachers in 11 schools (9 elementary, 2 junior high). We then divided schools into low, medium and high on "quality of implementation" based on combining two teacher questions in the following way. The two questions were: a) "Did this change (team teaching) represent an improvement?", and b)"Do you feel satisfied with the way the change was implemented?" We divided the 11 schools into high and low on each question on the basis of the average for all schools. If below average on both questions the school was classified as low. If high on one question and low on the other, it was placed in the medium category. If above average, on both questions, it became high. In this way 5, 3, and 3 schools were classified as low, medium, and high respectively. We then cross-tabulated these with questions on school climate asked of students, parents and teachers themselves. The results are presented in tables 12, 13 14, and 15.

Overall, in Table 13, those schools classified as high on "quality of implementation" as reported by teachers tend to have higher proportions of students who perceive a receptive climate than do students in schools classified as low. For example, 42% of the students in the low schools see the principal as "listening to" student suggestions compared to 58% of the schools classified as high. There are only two exceptions to this pattern (i.e. are students involved in decision-making ; teachers understand the students' point-of-view). No claim is made about causal direction, but it does seem noteworthy that those schools in which teachers are more satisfied with the implementation of team teaching as a major innovation are the ones which students are more likely to describe as receptive to their own roles. Based on the crude measures we have employed these factors do have a tendency to cluster.

Table 13 presents the same breakdown of schools on "quality of implementation"

in relation to parent views of the school. The same pattern exists in table one, although some of the differences are fairly small. For example, 71% of the parents in the schools classified as low report confidence in the ability of teachers compared to 82% of those parents in schools from the high category. It is interesting to note that in the schools classified as high on the quality of implementation of team teaching a much higher percentage of parents (55%) report the use of parents as teacher aides, than in those schools classified as low (39%). The one main anomaly in Table 13 concerns "are parents members of school committees". Here slightly higher proportions of parents who report that parents are members of school committees, are in the low category.

Finally, tables 14 and 15 present the data from teachers themselves. In this table the medium category is somewhat out of line, but on the whole there are large differences between the high and low categories. That is, in schools classified as high on quality of implementation compared to those classified as low teachers are more likely to perceive that students and parents are involved in certain specific aspects, that teachers trust other teachers to be helpful, that fellow teachers are seen as innovative, and that the principal supports teachers in their innovation. Again the only reversal in the table concerns "parents as members of school committees" which appears as slightly incompatible with teacher satisfaction with implementation of change.

In summary, our measure of quality of implementation of team teaching, is quite limited since it depends on teacher opinions, but it is noteworthy that students, parents and teachers perceptions of their involvement with various aspects of the school tends to cluster with the quality of implementation variable.

We would now like to return to the question of deriving implications from the data.

Deriving Implications from the Data

Our first step has been to write individual reports for each of the 46 schools that provides them with the findings from their own school and comparison results for all other schools at their level. We then encourage principals to disseminate the findings within the school to all constituencies. At best this serves only an awareness function that may bring to light unanticipated information or provide a more quantitative basis for crystallizing previously suspected views. Some of the aspects of awareness that may occur in our data are (1) the expression by students at the elementary level that they have opinions on social relations and think that it is important and relevant to express them (2) expression by students at the secondary level that they are dissatisfied with their participation (3) expressions by teachers and parents at the elementary level that they would desire certain forms of parent involvement involvement, (4) At a more specific level particular issues in a given school may become evident. For example, in one elementary school our data showed that teachers and parents were highly involved in the school and that they thought students were highly involved (i.e. they felt students were understood, listened to, etc.), but these students themselves perceived that they had quite low involvement both relative to other elementary schools and to what their elders perceived (5) In another school, the results showed that teachers were highly concerned about the question of evaluation in relation to their innovative programmes.

It is quite likely, however, that very little will change as a result of this information because deriving implications from social science data is a very complex process having many pitfalls and requiring the use of some problem solving framework and group process resources. In the past, without this framework there has been a remarkable tendency for practitioners to ignore

or not be able to envisage the implications of research findings, and for researchers to abandon their findings at the fault finding or indictment stage. Seldom have researchers gone on to posit operational strategems to address positively the implications of their studies. Our point is that as educational researchers we must accept a further responsibility to contribute to the working out of specific facilitating action programs to address the problems and issues identified in our researches as they relate to the collective goals of users. Bell and Mau (1971: pp. 6-44) describe in some detail the implications of thistype of role for the social scientist, and suggest that a major responsibili of the sociologist is to provide organizing and heuristic models which incorporate images of the future and a cybernetic orientation to decision-making.

Perhaps an illustration in terms of our findings on the role of the student in high school will indicate some of the problems and possibilities. As background, it is important to outline briefly the current situation in Ontario. In Ontario, the Ministry of Education has established a set of curriculum guidelines called HSI that necessitates (in theory) a high level of student and parent involvement in major decision-making in the matter of student course selection. The rationale offered by the Ministry appears sound: "(this approval) will allow students of varying interests and abilities to take pride in their personal education goals and the wise use of whatever instructured time is available..." Nonetheless, the plan recently has been severely criticized by the Ontario Teacher Federation on the grounds that in those schools where the plan has been pilot-tested students lack basic reading and writing skills. In addition, they contend, the students initially select courses which prove too difficult and then failing them, reselect

far too easy courses. The teacher group also found that students on a highly individualized timetable became "lost", lacking a collective identity, and even peer friendships.

To return to our findings it is clear that a serious communication barrier exists between students and teachers. As we stated above, over one half of the students in the study do not experience empathetic, open, influential, relationships with their teachers. In order to be effective, a program such as HS ! which is dependent upon candid and reciprocal exchanges between teacher and student must begin with very fundamental alternatives in teacher student role relationships.

We are currently planning to work with some secondary schools in our original sample to help them derive solution-oriented implications of these findings. Without a problem solving framework the reaction to the findings in a particular school might go something like this. Some teachers might say that results really are not valid because "students are in fact involved in committees", or "I as a teacher, always ask if they have suggestions", or "students will always say those things". If the viewing of these results were to include students as well as teachers the exchange might go something like this. (Teacher to student). "Tell me, in what ways do you not have free choice?" (Student to teacher) "You give us free choice as long as we choose what you think is right. You don't want to give us choice at all."

In the above case there is a failure on the part of teachers to entertain the possibility that student <u>perceptions</u> of the situation are real and important factors; there is a tendency on the part of students to attribute motives to teachers. Both groups think they know the "real facts" of the situation. The resulting atmosphere makes it unlikely that the problem can be dealt with adequately.

Another type of pitfall that might occur if a problem solving framework is not used involves jumping to conclusions or solutions without adequately analyzing the problem. Again hypothetically, a given school might view this data, and conclude that this is a terrible situation. This reaction might lead to establishing student positions on committees, relaxing rules and so on. Chances are that these solutions would lead either to power struggles, or to students taking advantage of the lack of rules, etc. Pretty soon, people would conclude that the new situation is worse than the old one.

An alternative approach is to employ some structure which is conducive to analyzing the different aspects of the problem and which treats individual and group responsibilities as important elements of possible solutions. Our role in such a situation would be to help the school set up some framework and procedure for clarifying the problem, and to bring to bear certain techniques and resources to deal with particular goals. In short, the two components of our contribution are the framework and supporting techniques.

The basic idea behind the framework is to help people take the problem apart in a way that the particular goal can be stated apart from constraints or problems in implementing it, and where the constraints can be identified and analyzed in a way that increases the likelihood that they can be reduced and that people will be committed to the solutions.

Before outlining the steps, it is important to state that the groups that are going to be directly affected by the possible solution will have to be involved in the process. For the question at hand, this means at least representatives of students, teachers and administrators. This is necessary for two reasons. First, adequate analysis of the problem requires the inputs of all three groups (particularly because different perceptions of the various groups are often part of the problem in the first place). The second reason

is that each group must be involved if there is going to be commitment and responsibility vis-a-vis solutions.

The following steps are involved in the general framework we are employing (See also Schindler-Rainman, Lippitt and Fox, in press). (1) Clarification of the desired goal(s); here it is necessary to avoid the tendency to state the issue in problem or solution terms and to help people state the goal in positive terms. It is also necessary to avoid the raising of constraints or practical issues at this first step (2) helping people generate and identify those factors that might facilitate its accomplishment. These factors might refer to perceptions, interpersonal, situational, etc. In short, this stage concerns the analysis of the problem (3) a third step is to generate possible ways (solutions) for reducing or eliminating certain important constraints, and for capitalizing on facilitators (4) finally,it is necessary to select solutions using criteria of relative importance, budget, manpower and other feasability questions. (In describing this sequence we are not implying that a single solution will suffice once and for all; social organizations must have continual problem solving approaches).

The other elements of the above process are the supporting techniques necessary to make it work. There are certain ground rules necessary such as the avoidance of premature evaluation or the need to actively listen and hear what certain groups are saying. Related to this, it is also necessary to deal directly with group process skills concerning problems of joint or participatory decision making. Certain techniques and simulations have been developed recently for use in schools.*

---

*Schmuck, R. A., Runkel, Philip J., Saturen, Steven L., Martell, Ronald T., and Derr, C. Brooklyn Handbook of Organization Development in Schools, 1972. Eugene, Oregon: Center for the Advanced Study of Educational Administration.

Pfeiffer, J. William and Jones, John E. A Handbook of Structured Experiences for Human Relations Training, 1970, Iowa City: University Associates Press.

We have no illusion that this approach will solve problems smoothly with the schools in our sample, nor do we assume that it will definitely work. However, it does seem to us worth trying and necessary if we are to attempt to resolve important social problems in education.

Our point is that the data only provide what might be called an initial "fact picture". The full set of reasons for these facts is only partially complete. But more fundamentally, solutions are not directly contained in the data, but must be dynamically derived through further joint investigations by the researcher and representatives of all constituencies. Schematically, the approach we have followed might be presented as follows.

Stage 1	Stage 2	Stage 3
Mapping of role orientations, interpersonal relationships, expectations.	Existing "facts" and future or end goal, juxtaposed	Constituency/ Researcher - Collaborat re - Incompatibilities, inconsistencies.

Stage 4	Stage 5
Use of PS framework and OD techniques - brainstorming, forcefield, group process skills - to specify, operationalize, the goal/solution.	Mobilization of Resources to reach goal.

Thus, the model begins with a fact gathering which includes a mapping of self and other expectations, and perceptions of interaction on the part of the major constituencies. Our basic assumption of course, is that individuals react on the basis of how they perceive the situation irrespective of its "factual" accuracy. At stages two and three discrepancies between present conditions and possible future ends are identified, and inconsistencies are confronted. Such an exchange however, cannot occur in an environment

of suspicion and fault finding. There is a need, particularly at stages three and four for activities to promote group process skills, and conditions supportive of risk taking and open exchange. Stage four also involves a specification of alternatives in role relationships consistent with future ends, and a consideration of what support structures and resources will be required to facilitate the development of these new roles. The final stage concerns the mobilization of resources, including technological, manpower, political and economic, required to reach the end goals.

Obviously, we have only superficially outlined the problem. More specific formulations of strategies implied in our approach remain to be spelled out. Perhaps, the greatest need in detailing these strategies in a particular situation is to take a <u>developmental perspective</u>. In another paper we are currently working on we are attempting to identify "matching models" of strategies for change: i.e. matching strategies of change with particular sets of conditions. In so doing, we take as our perspective the development of new roles and role relationships implied in users' objectives of future goals. From a developmental point of view future roles usually require at least three components: 1) new orientations, 2) new skills and capabilities and 3) new support structures. Different strategies will be necessary depending on the starting points of groups of users. There are numerous dilemmas ranging from tactical ones such as how much structure to provide vis-a-vis particular users to fundamental moral questions such as how much is the intervenor imposing his or her own views rather than helping users transform and develop educational structures and experiences congruent with <u>their</u> images of society and the future.

References

Bell, W. & Mau, J. The Sociology of the Future, New York: Russell Sage Foundation. 1971.

Combs, A. Educational accountability: Beyond behavioural objectives. Washington D. C. Association for Supervision and Curriculum Development, 1972.

Fullan, M. Overview of the Innovative Process and the User. Interchange, Vol. 3, #2/3, pp. 1-46, 1972.

Gross, N., Giacquinta, J. & Bernstein, M. Implementing Organizational Innovations: A sociological analysis of planned educational change. New York: Basic Books, 1971.

Pfeiffer, J. William and Jones, John E. A Handbook of Structured Experiences for Huamn Relations Training, 1970, Iowa City: University Associates Press.

Schindler-Rainman, E., Lippitt, R., & Fox, R. Toward a human society: Images of potentiality in the school and the community. Washington D. C. Institute for Applied Behavioural Science, in press.

Schmuck, R., Runkel, P., Saturen, S., Martell, R., & Derr, C. B. Handbook of Organizational development in Schools. Palo Alto: National Press Books, 1972.

KEY TO THE TABLES

1. There are three constituencies, students, parents, and teachers from three school levels, elementary, junior high and high school. All tables are cross-tabulated; the dimensions being the constituency responding and the school level. The final sample size is as follows:

	Student	Parent	Teacher
Elementary	1582	684	262
Junior High	730	405	172
High School	1281	694	294
	3593	1783	728

2. The tables are presented in percentage form rounded to the nearest whole number.

3. The non-respondents were excluded from the base N according to which the percentages were calculated. Cases where the non-response rate was over 5% are indicated as they occur. However, in many questions respondents were given the option of answering "don't know" and these percentages are part of the calculations in the table.

4. In most tables the percentages presented are based on combined categories from the original question. This was done with the following four formats:
   (a) When questions begin with "To what extent ..." five categories of response were offered - "To a great extent/quite a bit/a moderate amount/alittle/not at all". The percentage reported in these tables are based on combining the categories, "To a great extent/quite a bit"
   (b) When "Strongly agree/agree/disagree/strongly disagree/no opinion" occurs, then "Strongly agree/agree" are combined.
   (c) When "Considerably/moderately/very little/not at all" occurs, then "Considerably and moderately" are combined.
   (d) When "Never/sometimes/often/always" occurs, then "Often and always" are combined.

TABLE 1: Students' Perceptions of Teachers

1. Teachers understand the students' point of view?

	(often/always)*	(don't know)
Elementary	41%	8%
Junior High	33%	9%
High School	25%	8%

2. Do you feel free to talk to teachers about problems with school work?

	(often/always)	(don't know)
Elementary	45%	4%
Junior High	33%	4%
High School	30%	3%

3. If I suggest something to my teachers they will listen to me?

	(often/always)	(don't know)
Elementary	49%	4%
Junior High	40%	7%
High School	32%	6%

4. Do your teachers ask for and use the opinions and ideas of students in deciding what or how to teach?

	(often/always)	(don't know)
Elementary	19%	8%
Junior High	16%	7%
High School	13%	3%

5. Do you talk with your teachers about things that are going on in this school?

	(often/always)	(don't know)
Elementary	21%	5%
Junior High	15%	4%
High School	15%	2%

6. Are your teachers friendly, encouraging to you?

	(often/always)	(don't know)
Elementary	56%	2%
Junior High	53%	2%
High School	45%	3%

*categories

TABLE 2: Students' Perceptions of Principals

1. Do you think that the principal knows and understands the students' point of view on school matters?

	(often/always)	(don't know)
Elementary	58%	6%
Junior High	51%	18%
High School	25%	29%

2. Do you feel free to talk to your principal about school and other matters?

	(often/always)	(don't know)
Elementary	20%	NIL
Junior High	14%	NIL
High School	10%	NIL

3. Does the principal listen to students suggestions?

	(often/always)	(don't know)
Elementary	38%	13%
Junior High	42%	21%
High School	32%	23%

4. Do you think that students have much influence on the principal's decisions about what goes on in the school?

	(often/always)	(don't know)
Elementary	33%	17%
Junior High	35%	17%
High School	25%	9%

5. Is your principal friendly and encouraging to you?

	(often/always)	(don't know)
Elementary	58%	6%
Junior High	51%	18%
High School	25%	29%

TABLE 3: Actual Student Involvement

Are students in your school involved in decisions or discussions about goals and objectives, school rules and regulations, subjects to be taken, etc.?

	YES			
	Elementary %	Junior High %	High School %	Don't Know Response Average
Student*	33	39	27	8%
Parent**	14	18	27	46%
Teacher	29	34	45	8%
Principal/ Vice-Principal	39	26	27	NIL

*Student question phrased "Do you think that students have much say or influence on decisions about school matters?" (quite a bit/great deal)

**Parent question phrased "As far as you know, are students involved in making or influencing school decisions about goals and objectives, rules, and regulations, subjects to be taken?"

Teacher non-response = 6%

TABLE 4: Ideal Student Involvement

1. Should students be involved in decisions or discussions about goals and objectives, school rules and regulations?

	YES			
	Elementary %	Junior High %	High School %	Don't Know Response Average
Student*	38	38	44	6%
Parent	47	49	62	9%
Teacher	69	64	77	5%
Principal/ Vice-Principal	61	47	80	4%

Parent non-response 6%
Teacher non-response 7%
Principal/Vice-Principal non-response = 10%

*Student question phrased "Do you think that students at your grade level have a say or an influence on decisions about goals and objectives of the school, school rules and regulations, and the subjects in the school program?" (quite a bit/great deal)

2. How do you feel about becoming a member of a committee in the school which would discuss goals and objectives of the school, subjects to be taken, school rules and regulations etc.?

	(I would like to)	(Don't know)
Elementary	60%	24%
Junior High	43%	37%
High School	41%	30%

TABLE 5: Student Attitudes

1. In general, do you feel that people in this school (student, teacher, principal) work together supporting and encouraging each other?

	(great deal/some support & encouragement)	(don't know)
Elementary	69%	20
Junior High	73%	14
High School	54%	13

2. Most of my classes or lessons are boring?

	(Agree/strongly agree)	(don't know)
Elementary	29%	7
Junior High	26%	9
High School	50%	5

3. The subjects we take in school are very valuable and important to me?

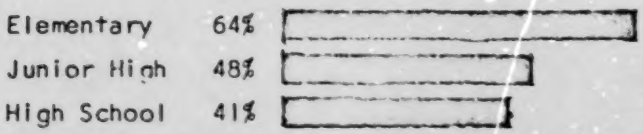
	(Agree/strongly agree)	(don't know)
Elementary	81%	8
Junior High	75%	10
High School	47%	12

TABLE 6 : Parent Contact with School

1. Have you discussed any of the following with the principal or any of the teachers:

   The educational goals and objectives of the school, school rules and regulations, grading and reporting practices, working as a teacher aide, subject matter or teaching materials, adopting new practices or programs, individual instruction for your child, after hours sports programs and others.

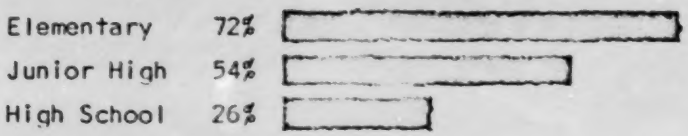
   (one or more discussions)



16% Non-response

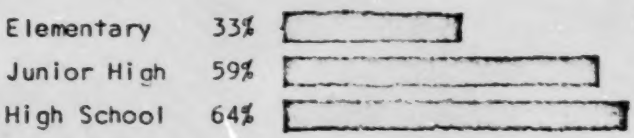
2. How often do you attend parent nights, open house, interviews with the teacher, etc.

   (two times or more)



3. How many times during the school year have you been inside the school during school hours?

   (never)



4. Have you discussed with the principal or any of the teachers;

   (a) The educational goals and objectives of the school?*

	Elementary %	Junior High %	High School %
Yes	29	26	15
No, this is the schools responsibility	33	32	46
No, but I would like to	38	42	39

   (b) Adopting new practices or programs

Yes	20	15	8
No, this is the schools responsibility	50	50	58
No, but I would like to	30	36	34

*13% Non-response

TABLE 7 : Parent Involvement

As far as you know, are parents in this community involved in school decisions in each of the following areas?

	YES								
	PARENTS %			TEACHERS %			PRINCIPAL/VICE-PRINCIPAL %		
	EL	JH	HS	EL	JH	HS	EL	JH	HS
a) The educational goals and objectives of the school	23 (38)	20 (34)	16 (41)*	19 (21)	19 (24)	13 (25)	21 (0)	33 (6)	17 (4)
b) School rules and regulations	16 (38)	11 (34)	8 (36)	12 (12)	13 (16)	10 (20)	2 (0)	12 (0)	4 (0)
c) Grading and reporting practices	16 (34)	11 (33)	8 (33)	32 (5)	19 (11)	7 (18)	42 (0)	33 (0)	0 (0)
d) What subjects are offered or curricular materials used	13 (45)	13 (38)	14 (39)	21 (12)	15 (13)	18 (21)	23 (0)	6 (0)	0 (0)
e) What new program or practices are adopted in the school	25 (41)	19 (39)	14 (44)	30 (12)	25 (14)	17 (22)	35 (2)	22 (0)	9 (0)
f) Helping plan what type of instruction is best for their child	29 (31)	25 (31)	32 (31)	25 (13)	25 (12)	23 (21)	19 (0)	28 (0)	32 (0)
g) Members of school committees	41 (39)	34 (44)	22 (44)	26 (16)	26 (13)	17 (24)	41 (0)	41 (0)	36 (0)
h) Working as a teacher aide in the school	47 (35)	26 (49)	9 (53)	59 (6)	47 (7)	12 (23)	81 (0)	67 (0)	21 (0)

EL represents Elementary response
JH represents Junior High response
HS represents High School response
* the numbers in parenthesis represent percentage of "don't know" responses.

TABLE 8: Desired Parent Involvement

Should parents be involved in school decisions in each of the following areas?

	SHOULD BE									WOULD YOU BE INTERESTED?		
	PARENTS			TEACHERS			PRINC/VICE-PRINC			PARENTS		
	EL	JH	HS	EL	JH	HS	EL	JH	HS	EL	JH	HS
(a) The educational goals and objectives of the school	79 (6)	73 (4)	74 (8)	74 (11)	76 (4)	81 (5)	81 (2)	82 (0)	91 (4)	61 (9)	59 (7)	52 (11)
(b) School rules and regulations	56 (4)	46 (3)	49 (4)	47 (5)	47 (6)	54 (5)	46 (0)	18 (0)	44 (0)	48 (6)	41 (5)	43 (5)
(c) Grading and reporting practices	48 (7)	41 (4)	35 (7)	68 (3)	50 (6)	43 (7)	81 (7)	60 (0)	35 (9)	45 (6)	40 (5)	33 (7)
(d) What subjects are offered or curricular materials used	56 (16)	56 (11)	57 (15)	63 (8)	58 (6)	68 (9)	64 (5)	18 (6)	68 (5)	56 (13)	53 (8)	51 (14)
(e) What new program or practices are adopted in the school	74 (10)	73 (6)	67 (14)	72 (4)	66 (7)	74 (9)	90 (0)	69 (0)	73 (5)	69 (11)	62 (8)	60 (13)
(f) Helping plan what type of instruction is best for their child	73 (7)	71 (6)	77 (7)	63 (8)	61 (12)	70 (9)	63 (5)	50 (0)	70 (13)	70 (8)	69 (6)	69 (8)
(g) Members of school committees	80 (12)	78 (9)	68 (12)	72 (8)	65 (9)	72 (12)	95 (0)	86 (7)	77 (14)	44 (10)	35 (11)	32 (13)
(h) Working as a teacher aide in the school	66 (15)	50 (19)	42 (22)	89 (7)	76 (8)	57 (20)	93 (2)	94 (0)	59 (14)	37 (8)	24 (9)	21 (10)

Non-response range for this table
Parents = 65-127 respondents
Teachers = 35-59 respondents

*the numbers in parenthesis represent percentages of "don't know" respondents

TABLE 9: Teacher Attitudes Towards Innovation

1. Do teachers actually use new practices in their classroom?

	(to a great extent/quite a bit)	(Don't know)
Elementary	51%	0%
Junior High	46%	2%
High School	43%	1%

2. Do teachers search out information that is relevant and important to educational change?

	(to a great extent/quite a bit)	(Don't know)
Elementary	36%	1%
Junior High	42%	2%
High School	38%	2%

3. Do teachers support and encourage other teachers who want to use new ideas and practices?

	(to a great extent/quite a bit)	(Don't know)
Elementary	53%	2%
Junior High	63%	1%
High School	48%	1%

4. Do individual teachers evaluate or assess new practices which they have adopted to determine whether they are worthwhile?

	(to a great extent/quite a bit)	(Don't know)
Elementary	63%	5%
Junior High	59%	2%
High School	44%	5%

5. Do teachers understand thoroughly the objectives and nature of the changes they do adopt?

	(to a great extent/quite a bit)	(Don't know)
Elementary	43%	2%
Junior High	47%	3%
High School	33%	5%

6. Do you feel that changes which have been made have improved the quality of education for the students?

	(to a great extent/quite a bit)	(Don't know)
Elementary	52%	2%
Junior High	52%	1%
High School	48%	4%

TABLE 10: Effect of the Change (Teacher and Administrators' Perceptions)

1. Has there been an open discussion in the school of the advantages and disadvantages of this practice?

Teacher	(to a great extent/quite a bit)	(Don't know)
Elementary	35%	2%
Junior High	41%	4%
High School	35%	7%
Principal/Vice-Principal		
Elementary	66%	0
Junior High	73%	0
High School	65%	4%

2. To what extent did your school search for alternative solutions to this problem before adopting the new practice?

Teacher	(to a great extent/quite a bit)	(Don't know)
Elementary	27%	27%
Junior High	29%	31%
High School	25%	29%
Principal/Vice-Principal		
Elementary	39%	2%
Junior High	47%	13%
High School	55%	5%

3. To what extent do you think there was a clear educational need or problem in your school which this new practice would help to meet or resolve?

Teacher	(to a great extent/quite a bit)	(Don't know)
Elementary	65%	4%
Junior High	60%	4%
High School	66%	3%

4. Do you feel that this practice represents an improvement in educational practice at your school?

Teacher	(to a great extent/quite a bit)	(Don't know)
Elementary	70%	4%
Junior High	59%	4%
High School	66%	3%

Teacher non-response = 11% Principal/Vice-Principal non-response = 8-9%

TABLE 11: Acceptance of the Change (Teacher & Principal/Vice-Principal Perceptions)

1. Do students who were affected by this new practice accept it?

Teacher	(to a great extent/quite a bit)	(Don't know)
Elementary	82%	7%
Junior High	74%	9%
High School	79%	3%
Principal/Vice-Principal		
Elementary	98%	0
Junior High	100%	0
High School	91%	0

2. Do teachers who were affected by this new practice have a favourable attitude towards it?

Teacher	(to a great extent/quite a bit)	(Don't know)
Elementary	75%	4%
Junior High	75%	4%
High School	64%	3%
Principal/Vice-Principal		
Elementary	95%	0
Junior High	93%	0
High School	87%	0

3. Were parents well informed about this new practice?

Teacher	(to a great extent/quite a bit)	(Don't know)
Elementary	42%	15%
Junior High	31%	24%
High School	37%	16%
Principal/Vice-Principal		
Elementary	56%	3%
Junior High	75%	0
High School	61%	9%

4. Do you feel satisfied with the way in which this change was implemented in your school?

Teacher	(to a great extent/quite a bit)	(Don't know)
Elementary	66%	5%
Junior High	64%	3%
High School	63%	3%
Principal/Vice-Principal		
Elementary	83%	0
Junior High	69%	0
High School	83%	0

Teacher non-response = 12% Principal/Vice-Principal = 0%

TABLE 12: Student Perceptions of School by School
(ranked on quality of implementation)

		Lo %	Med %	Hi %	N
1.	Do you think that your teachers know and understand the students' points of view on classroom or school matters? (often/always)	39	55	44	653
2.	Do you feel free to talk to your teachers about problems you are having with your school work? (often/always)	39	50	57	692
3.	Do you think that the principal knows and understands the students' points of view on school matters? (often/always)	47	60	62	643
4.	Does the principal listen to student suggestions? (often/always)	42	47	58	624
5.	Do you think that students have much say or influence on decisions about school matters? (quite a bit/to a great extent)	40	46	34	650
6.	Do you think that students at your grade level should have a say or an influence on decisions about goals and objectives of the school, school rules and regulations and the subjects in the school program? (quite a bit/to a great extent)	37	45	51	656
7.	How do you feel about becoming a member of a committee in the school which would discuss goals and objectives of the school, subjects to be taken, school rules and regulations and so on? (I would like to)	68	76	88	538
8.	This school encourages students to think for themselves. (strongly agree/agree)	82	83	91	642
9.	In general, do you feel that people in this school (the students, the teachers and the principal) work together supporting and encouraging each other? (yes)	84	88	93	642
10.	Is your mother or father interested in what goes on in this school? (often/always)	55	66	71	686
11.	How often do your teachers try out new ways of doing things in the classroom? (often/always)	42	57	60	695

TABLE 13: Parent Perceptions of School by School
(ranked on quality of implementation)

		Lo %	Med %	Hi %	N
1.	To what extent do you have confidence in the ability of the teachers of this school to give your children a satisfactory education? (to a great extent/quite a bit)	71	75	82	378
2.	How free do you feel to approach your child's teachers to discuss the subjects that your child is taking? (very/moderately free)	82	83	88	379
3.	How often do you attend parent nights, open house, interviews with teachers, etc.?	61	75	79	379
4.	Have you discussed educational goals and objectives of the school with the principal or any fo the teachers? (yes)	31	20	41	350
5.	Have you discussed adopting new practices or programs with the principal or any of the teachers? (yes)	16	12	24	337
6.	How satisfied are you with the amount of information you get about the school program and activities? (very/fairly satisfied)	76	76	86	379
7.	As far as you know, are parents in this community involved as teacher aides? (yes)	39	64	55	371
8.	As far as you know, are parents in this community involved as members of school communities? (yes)	40	36	30	366
9.	Is this a school where the principal and teachers introduce a lot of changes in the school program or do things seem pretty much the same from month to month? (very many/quite a few changes occur)	23	19	38	317

TABLE 14: Teacher Perceptions of School by School
(ranked on quality of implementation)

		Lo %	Med %	Hi %	N
1.	Are students in your school involved in decisions or discussions about school rules and regulations? (yes)	33	28	48	145
2.	Are students in your school involved in decisions or discussion about subjects, courses & teaching materials? (yes)	28	39	52	141
3.	As far as you know, are parents in this community involved in school decisions or discussions about what new programme or practices are adopted in the school?	21	26	41	128
4.	As far as you know, are parents in this community involved working as teacher aides in the school? (yes)	49	90	79	153
5.	As far as you know, are parents in this community involved as members of school committees? (yes)	29	23	16	128
6.	To what extent do you trust other teachers to be helpful and encouraging when you admit you have a problem? (to a great extent/quite a bit)	60	61	74	164
7.	Do teachers search out information that is relevant and important to educational change? (to a great extent/quite a bit)	42	26	41	159
8.	Do individual teachers evaluate or assess new practices which they have adopted to determine whether they are worthwhile? (to a great extent/quite a bit)	61	59	77	158
9.	Do teachers understand thoroughly the objectives and the nature of the changes they do adopt? (to a great extent/quite a bit)	36	39	50	159
10.	Do you feel that changes which have been made in your division/department/grade levels have improved the quality of education for the students? (to a great extent/quite a bit)	45	42	77	157

TABLE 15: Teacher Perceptions of Administration by School
(ranked on quality of implementation)

		Lo %	Med %	Hi %	N
1.	The principal encourages the staff to talk openly with him about any school matters that bother them. (to a great extent/quite a bit	49	47	79	161
2.	If I have a criticism about any aspect of the school, I feel free to go and tell him openly about it. (to a great extent/quite a bit)	40	49	61	159
3.	The principal knows the problems I face as a teacher. (to a great extent/quite a bit)	37	47	64	162
4.	The principal seeks and uses suggestions made by teachers. (to a great extent/quite a bit)	50	55	70	161
5.	I can really influence the decisions of the principal regarding things about which I am concerned. (to a great extent/quite a bit)	32	28	63	160
6.	Does the principal seek out new ideas to introduce into the school's programme? (to a great extent/quite a bit)	42	29	71	154
7.	Do parents in this community support the principal and teachers when the school wants to introduce new practices? (to a great extent/quite a bit)	32	40	58	145
8.	Does the Superintendent support new practices in the school, even if they are new or different? (to a great extent/quite a bit)	68	68	88	137